

REMARKS

Responsive to the outstanding Office Action, applicant has carefully studied the Examiner's rejections. Favorable reconsideration of the application in light of the following amendments and arguments is respectfully requested.

The claims pending in the application are claims 1-8 and 13. In the response, withdrawn claims 9-12 have been canceled. It is respectfully submitted that no new matter has been introduced in these amendments.

RESPONSE TO ELECTION/RESTRICTION REQUIREMENT

Applicants hereby confirm the oral election of April 12, 2007. As claims 9-12 are drawn to a non-elected species, these claims have been canceled herein.

REJECTIONS UNDER 35 USC §103

In the Office Action, the Examiner rejects claims 1-6 under 35 USC §103, as being unpatentable over US 6106892 to Ye in view of US 5,599,387 to Neumann. Claims 7, 8 and 13 were rejected under Ye and Neumann, as above, and further in view of Soubeyrand (US 5,798,142).

Ye discloses a process for the production of silica coatings on a glass sheet, where in the process utilizes a phosphorous or a boron ester. The phosphorous compounds utilized therein are phosphorous III compounds, particularly triethyl phosphite and trimethyl phosphite.

Neuman discloses the production of layers which combine silicon and another metal on a glass sheet (column 3, lines 9-14). The Examiner cites Neuman as showing an accelerant for the production of silica layers, which accelerant may include phosphorous compounds.

Soubeyrand shows the deposition of a silica layer utilizing ethylene and an oxidant.

Claim 1 discloses a process for depositing a silica coating upon a heated glass substrate. The process includes providing a heated glass substrate having a surface upon which the coating is to be deposited. A precursor mixture comprising a silane, an oxygen source, a radical scavenger, a phosphorous (V) compound and an inert carrier

gas are directed toward and along the surface to be coated, and the mixture is reacted at or near the surface to form a silica coating on the surface of the glass substrate.

The Examiner acknowledges that the Ye reference utilizes only phosphorous III compounds. To overcome this deficiency of ye he has applied the Neuman reference. It is respectfully submitted, however, that this combination is improper.

First, the Neuman reference specifically addressed the deposition of a layer of silicon combined with another metal (as shown in the summary of the invention, as referenced above.) Tin is listed as a preferred metal, but the invention suggests other metals may be usable in combination to produce the silicon+metal layer. It is respectfully submitted that the use of a phosphorous compound, to the extent it is shown in the Neuman reference, is shown only in conjunction of the deposition of silicon + another metal, and not for the production of silica alone. Thus, it is respectfully submitted that the Neuman reference, in combination with Ye, would not show the use of a phosphorous V compound in the deposition of a silica layer.

In addition, it is respectfully submitted that the mention of Phosphorous V compounds in Neman is only one of a "laundry list" of potential accelerants, and there is no suggestion as to any particular utility in the selection of a phosphorous V compound. In the present invention for the deposition of a silica layer, it has been determined that the use of, specifically, a phosphorous V compound has been found to have especially beneficial results. This can be seen, for example, in paragraph [0010] of the application as filed. This paragraph notes that the use of phosphorous V compounds resulted in an especially beneficial process for the production of silica on glass. This is further elucidated in paragraph [0011] of the application as filed, wherein further benefits for the use of phosphorous V compounds are noted. There is nothing in the Neuman reference to determine the benefits of the use of that particular compound out of the list of all of the compounds disclosed therein. Only in light of the present disclosure are such benefits apparent.

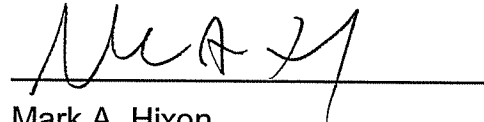
The Soubeyrand reference has been disclosed only against the dependent claims, and it is respectfully submitted that it does not add anything to the analysis as given above.

Claim 13 is similar to claim 1, but gives additional detail about the process. It is respectfully submitted that claim 13 is allowable for the reasons given above with respect to claim 1.

Claims 2-8, which depend, directly or indirectly from independent claim 1 are believed to be allowable based, at least, upon this dependence from what are believed to be allowable base claims. Therefore, all of the claims are believed to be allowable over the applied art of record.

In view of the above, it is submitted that all of the claims are in condition for allowance, and action towards that end is respectfully requested. Should the Examiner wish to modify the application in any way, applicant's attorney suggests a telephone interview in order to expedite the prosecution of the application.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read 'Mark A. Hixon', is written over a horizontal line.

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